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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/021,917	12/13/2001	John M. Bergstrom	426882001600	2229

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BANNER & WITCOFF AND ATTORNEYS FOR ACCENTURE
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CHICAGO, IL 60606

EXAMINER

COLON, CATHERINE M

ART UNIT PAPER NUMBER

3623

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/021,917

Applicant(s)

BERGSTROM, JOHN M.

Examiner

C. Michelle Colon

Art Unit

3623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11,13-24,26-34,36-44 and 46-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-11,13-24,26-34,36-44 and 46-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The following is a Final Office Action in response to the communication received on May 23, 2005. Claims 1, 3-11, 13-24, 26-34, 36-38, 44, 46-48 and 54 have been amended. Claims 2, 12, 25, 35 and 45 have been canceled. Claims 1, 3-11, 13-24, 26-34, 36-44 and 46-54 are now pending in this application.

Response to Amendment

2. Applicant's amendments to claims 1, 3-11, 13-24, 26-34, 36-38, 44, 46-48 and 54 are acknowledged. The amendments are sufficient to overcome the 35 U.S.C. 101 technological arts rejection set forth in the previous Office Action. Therefore, the 35 U.S.C. 101 technological arts rejection of claims 1-33 is withdrawn.

Response to Arguments

3. Applicant's arguments have been fully considered, but are found unpersuasive. In the Remarks, Applicant argues that Zoltners does not teach or suggest determining demand distributions for the allocations from the profit data and determining each profit function from a corresponding demand distribution.

In response to the argument, Examiner respectfully disagrees. On page 2, paragraph 2, Zoltners discusses that the *sales response function* represents the sales tradeoff which can be expected from various resource allocations. A *sales response* can be considered the *demand* that results as a function of the resource allocations, which can include sales budget, sales representatives, sales calls, time, etc (see page

1). Additionally, on page 2, paragraph 2, Zoltners expressly anticipates the argued limitations where it states that the profit response function can be obtained directly from the sales response function and cost data. In the same citation in Zoltners, it refers to Table 1 as describing frequently used sales response, or demand, functions. It is in Table 1 where the Poisson, Markov and normal models are listed among the frequently used demand functions.

Accordingly, Applicant's arguments have been fully considered, but found unpersuasive. The rejections to the claims are maintained and repeated below.

Claim Objections

4. Claim 54 is objected to because of the following informalities: the statutory class of claim 54 does not match that of claim 1, from which it depends. Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 3-11, 13-24, 26-34, 36-44 and 46-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Zoltners et al., "Integer Programming Models for Sales Resource Allocation" (March 1980).

As per claim 1, Zoltners et al. discloses an apparatus that determines allocations in a business operation to maximize profit on a computer system, comprising:

a memory, a processor that accesses the memory to retrieve computer-executable instructions to perform: collecting profit data for a plurality of classes in the business operation, each class including an allocation having a cost function, and each allocation belonging to the group consisting of physical allocations and economic allocations (page 1, paragraph 2; page 2, paragraphs 1 and 2; Table 1 on pages 3 and 4; page 9, last paragraph; The reference discloses allocating sales resources such as sales budgets, sales calls, sales reps, etc., among various sales entities (i.e., classes) such as sales districts, accounts, prospects, products, etc., where the allocations are made based on expected profit results and cost data for each sales entity. The expected profit and cost are subjective data input by the user. The allocations are physical (i.e., geographic regions) as well as economic (i.e., sales budgets.);

determining profit functions for the allocations from the profit data by:

determining demand distributions for the allocations from the profit data and determining each profit function from a corresponding demand distribution (page 2, paragraph 2; (M3) on page 11; Table 1; The sales response, or demand, function represents the sales tradeoff which can be expected from various resource allocation strategies.).

formulating a Multiple Choice Knapsack Problem to maximize profit from the profit functions, the cost functions, and a cost constraint ((M1) on page 9; (M3) on page

11; M1 and M3 are Multiple Choice Knapsack models that maximize the profit based on various resource allocations and cost constraints.); and

solving the Multiple Choice Knapsack Problem to determine values for the allocations (the illustrated applications on pages 9 and 10; The Multiple Choice Knapsack model is solved for various sales resource allocation strategies such as sales representative time management and sales force resource allocation.).

As per claims 3 and 4, Zoltners et al. discloses the apparatus according to claim 1, wherein each demand distribution includes a Poisson model or a Markov model (row 4 on page 3; row 2 on page 4; The reference discloses using both Poisson and Markov models in its sales resource allocation strategies.).

As per claim 5, Zoltners et al. discloses the apparatus according to claim 1, wherein each demand distribution includes a normal distribution model (paragraph 2, page 2; row 5 on page 5; The reference discloses applying concave functions, also known as bell-curve and normal distribution models to its resource allocation strategies.).

As per claim 6, Zoltners et al. discloses the apparatus according to claim 1, wherein the allocations include spatial allotments (paragraph 1, page 2; sales representative time management and sales force resource allocation on pages 9 and 10; The reference discloses spatial allotments such as deciding how to allocate time to sales representatives or products across sales territories.).

As per claim 7, Zoltners et al. discloses the apparatus according to claim 1, wherein the allocations include monetary allotments (paragraph 2, page 1; paragraph 2,

page 18; The reference discloses the decision of allocating sales budgets across products and/or markets.).

As per claims 8-10, Zoltners et al. discloses the apparatus according to claim 1, wherein the cost constraint is a greater-than-or-equal-to inequality constraint, an equality constraint or a less-than-or-equal-to inequality constraint (page 11; Model (M3) illustrates equality, greater-than-or-equal-to and less-than-or-equal-to inequality constraints.).

As per claim 54, Zoltners et al. discloses the apparatus of claim 1, wherein determining demand distributions for the allocations from the profit data comprises: modeling the demand distributions with corresponding probabilistic functions (row 1 on page 5; The reference discloses applying probability estimates to the resource allocation strategies.).

Claims 11, 13-24, 26-34, 36-44 and 46-53 recite substantially similar limitations to claims 1, 3-10 and 54 above. Therefore, claims 11, 13-24, 26-34, 36-44 and 46-53 are rejected on the same basis as claims 1, 3-10 and 54 above.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Michelle Colon whose telephone number is 571-272-6727. The examiner can normally be reached Monday – Friday from 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 571-272-6729.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

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or faxed to:

703-872-9306 [Official Communications; including After Final
communications labeled "Box AF"]

571-273-6727 [For status inquiries, draft communication, labeled
"Proposed" or "Draft"]

Hand delivered responses should be brought to:

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cmc

August 5, 2005


SUSANNA M. DIAZ
PRIMARY EXAMINER

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